

## REMARKS

Applicant petitions the Commissioner of Patents and Trademarks to extend the time for response to the Office Action dated November 28, 2003 from February 28, 2003 to March 28, 2003. Submitted herewith is a check in the amount of \$55.00 to cover the cost of the extension.

Claims 17-20 stand rejected. Upon entry of the present amendment, claims 17 (currently amended) -20 will be in the application. Re-examination and reconsideration are respectfully requested.

On page 2, paragraph 1, of the Office Action, under the heading "Detailed Action, Claim Rejections - 35 USC § 103", of the Specification it was stated as follows:

" Claims 17-20 are rejected under 35 USC 103(a) as being unpatentable over Steffen (4,037,527) in view of Joy (3,785,271). Steffen teaches, substantially, each feature of the claimed invention as shown in the red marked up copy of Steffen's Figure 3 attached to the Office Action of November 19, 2002. Steffen, however, does not teach an opening in the wall. Joy teaches an opening in the wall as shown in the red marked up copy of Joy's Figure 4 attached to the Office Action of November 19, 2002. It would have been obvious to one of ordinary skill in the art at the time of invention to have made an opening in Steffen's wall in order to pass, for example, electrical wires for supplying a socket with electricity for use in Steffen's

bin (10) as taught by Joy.

Regarding claim 4, it is well known to provide slots in place of holes for flexibility of fastening of flanges."

On page 3, paragraph 2, of the Office Action, under the heading "Examiner's Response to Applicant's Remarks", of the Specification it was stated as follows:

" Applicant's arguments with regard to claims 17-20 have been considered. After careful consideration, applicant's arguments were found to not have been persuasive.

Applicant argues that Steffen is an inappropriate reference because it does not solve the same problem. The examiner's framing of the problem to be solved is reasonable though broader than applicant's framing. The problem is one of supporting a circulating fan externally to a vessel for the purpose of generating airflow through the vessel. The present invention clearly seeks to solve this problem. Furthermore, one seeking to solve this problem may well look to all types of vessels including grain bins. Steffen clearly supports the fan externally to the vessel using a structure that is similar to the present invention except for an opening. Joy is being cited specifically for an opening. Joy teaches an external fan supported by a structure having an opening in the side. Joy's opening is for electrical wires. It would have been obvious to one of ordinary skill in the art at the time of invention to have formed an appropriate sized opening in the side of Steffen's fan support as

taught by Joy in order to pass electrical wires as taught by Joy.

Applicant further asserts that the recited language "permanently" or "temporarily" makes the claimed apparatus more or less patentable. The examiner disagrees that a permanent or temporary positioning of the claimed invention with respect to the vessel changes the patentability of the pending apparatus claims. The features "permanently" or "temporarily" do not add to the apparatus claims because they do not teach additional structure, but merely affect the intended use of the claimed apparatus.

Moreover, in this case, Stephen teaches a fan support structure similar to the claimed structure in that it is bolted to the vessel and to the fan. In other words, either a permanent or temporary configuration of Steffen's fan support may be achieved at will.

Finally, applicant argues that Joy teaches permanently closing the opening with a socket. The examiner asserts that there is still a hole in the fan support, the socket is not permanently placed because it has removable screws and wires still effectively extend through the opening even when the socket "permanently" closes the opening.

The above cited references have been carefully reviewed but are not believed to render the invention unpatentable.”

Applicant respectfully submits the statement that “...Steffen teaches a

solution to the same problem the present invention seeks to solve. The problem is mounting a flanged fan to a normally closed manway (perhaps of a different diameter as the flange). Steffen teaches a flange structure mountable to the manway and the fan as claimed...” is **incorrect**. Steffen connects a flange and fan to a fan opening 18 in a grain bin; fan opening 18 is not a normally closed manway, and therefore the problem solved by the presently claimed invention is different from that solved by Steffen. Steffen does not temporarily connect a portable flange to a **normally closed** manway to a tank while workers are temporarily in the tank, and provide **unobstructed** openings in the flange to accommodate workers’ hoses and electrical lines.

Claim 17 has been amended a second time and is now believed allowable over all prior art. Amended claim 17 is directed to:

“A portable flange for temporarily connecting an exhaust fan for exhausting gases and circulating fresh air to a normally closed manway to a tank while workers are temporarily working in said tank which enables the extension of worker’s hoses and electrical wires from the exterior of said manway through said manway having said exhaust fan attached thereto, said flange comprising:

- a. a top plate for temporarily connecting said flange to said exhaust fan, said top plate having a generally circular opening in the center thereof,
- b. a bottom plate for temporarily connecting said flange to said manway, said bottom plate having a generally circular opening in the center thereof, and
- c. a hollow sleeve having a cylindrical wall terminating in two generally circular ends, one of said two ends being connected to said bottom

plate at the periphery of said opening in said bottom plate, and the other of said two ends being connected to said top plate at the periphery of said opening in said top plate, said sleeve having at least one unobstructed opening in said wall for temporary receipt of said hoses and electrical wires, wherein said top plate is parallel to said bottom plate, and said wall of said sleeve is perpendicular to said bottom plate and said top plate.”

whereas Steffen (4,037,527) teaches a fan 25 connected to a permanent, not portable mounting structure 21 having no opening in the wall thereof for receipt of lines which are normally connected to a grain bin, and, furthermore, are only removed for “...easy access to the fan and motor 25 and 26 for repairs if needed.” (See column 3, lines 24-27 of Steffen). The purpose of the mounting structure 21 of Steffen is to “allow for the ease with which a fan or other structure needed to be connected to a grain bin opening can be connected or disconnected...” (see column 2, lines 47-49 of Steffen), **whereas the purpose of the present invention is to enable worker’s hoses and electrical wires to enter a manway having a fan temporarily connected thereto.** The portable exhaust fan of the present invention is only temporarily connected to a normally closed manway of a tank while workers are performing work in the tank, and the manway is open only to provide access for workers to the interior of the tank. As is well known in the art, when work in the tank is complete, the exhaust fan is removed and the opening or manway holding the invention is closed to enable the tank or other enclosed area to be truly enclosed and utilized for its intended purpose, such as holding fluids. The flange of the invention is portable and is moved from a completed tank to another tank for temporary connection of an exhaust fan thereto.

Thus, Steffen teaches a permanent flange and exhaust fan which are normally connected to a fan opening in a grain bin, not a normally closed manway in the grain bin, whereas the present invention is only connected to a tank when workmen are in the tank and the tank is not being utilized for its intended purpose. Furthermore, one of ordinary skill in the art trying to extend worker's hoses and electrical wires temporarily into a normally closed tank manway having an exhaust fan therein *temporarily* while workmen are working in the tank would not be reasonably led to consider a grain bin having a normally attached fan necessary for the grain drying bin to perform its intended function of **drying grain having no means for enabling workers' lines to enter the bin through the opening in the grain bin to which the fan is attached**. Hindsight only would lead one to utilize the teaching of Steffen as one of two combined references to create the present invention.

Joy teaches a low profile ventilator apparatus for use in mobile homes, modular homes and the like which includes a structural combination of lighting means or a radiant heat lamp cooperatively associated with a bathroom fan such as to permit straight through or vertical discharge of air and being uniquely constructed to fit ceiling to roof depths ranging from approximately 4 to 13 inches. (See Abstract of Joy.) Thus, Joy teaches an apparatus which is vastly different from the subject matter of the present invention. The apparatus taught in Joy is **not attached to a tank normally closed manway or a grain bin fan opening**; the apparatus of Joy is attached permanently to the roof of a bathroom of a mobile or modular home.

The opening indicated in red in the copy of Figure 4 and 5 of Joy attached to the office action is obstructed, not unobstructed as claimed in currently amended claim 17 for enabling a worker's **hoses and electrical wires** to be inserted through a

normally closed manway having a fan attached thereto as presently claimed; the opening in Joy is obstructed or closed by receipt of a pre-wired conduit box 22d including in the base housing 22, see column 5, lines 1-2 of Joy. **No hoses and electrical wires can be extended through the obstructed opening of Joy as needed to aid workers employed inside a tank.** As further stated in Joy, column 5, lines 3-8:

“The conduit box 22d includes two plug sockets a shown and designated 22e and 22f. The plug sockets 22e and 22f are adapted to receive the male plugs (not shown) attached at the ends of the wire means 33a and 35a to thus supply an electricity source to the light socket 33 and the motor 35 respectively.”

Thus the opening in Joy is permanently closed by the connection of conduit box 22 thereto, and the **opening could not be used for the receipt of workers' lines, including hoses and electrical wires, extending into a manway.** The electrical connections permanently connected to conduit box 22 extend only to light socket 33 and fan motor 35. **The lines of the present invention do not extend to the fan connected to the manway of the tank; rather, the lines of the present invention extend through the opening to the workers' equipment inside the tank.**

Joy actually teaches away from the presently claimed invention. As quoted above, the Office Action states that:

“Finally, applicant argues that Joy teaches permanently closing the opening with a socket. The examiner asserts that there is still a hole in the fan support, the socket is not permanently placed because it has removable screws and wires still effectively extend through the opening even when the socket "permanently" closes

the opening.”

**It is important to realize that the unobstructed opening in the claimed invention must remain open for extension of worker’s hoses and electrical wires therethrough to the inside of the tank in which the workers are employed, whereas the opening in Joy is closed when the ventilator apparatus of Joy is operational. Joy’s closed or obstructed opening would prohibit the extension of additional worker’s hoses and electrical wires therethrough as additional workers and equipment are utilized by workers in a tank. Joy does not teach that an opening is maintained is kept open to enable workers in a tank to add and remove hoses and electrical lines therethrough as needed during the course of repairing a tank.**

It is thus believed that it is not obvious to combine Steffen with Joy. As stated in *In re Sernaker*, 217 USPQ 1, 6 (CAFC 1983):

“[P]rior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings.”

In a telephone conversation with the Examiner today, the Examiner suggested that applicants’ attorney review U.S. Patent 5,337,994 issued to Vipond et al which has not been seen by applicant or his attorney before today. Vipond et al is not believed to render the presently claimed invention unpatentable since Vipond et al discloses a hinged fan apparatus which does not provide an unobstructed opening for the extension of additional worker’s hoses and electrical wires therethrough during fan operation as additional workers and equipment are

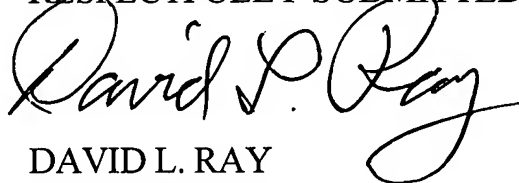


utilized by workers in a tank.

It is submitted that there is nothing in Joy or Steffen to suggest the advantage from combining their teachings. It is therefore believed, for the reasons stated above, that claims 17-20 as amended are patentable over all prior art.

In accordance with the foregoing remarks and amendments it is believed that all claims are in condition for allowance, and accordingly an early notice of allowance is respectfully requested.

RESPECTFULLY SUBMITTED:

A handwritten signature in black ink, appearing to read "David L. Ray", written in a cursive style.

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